



**Testimony** 

Before the Subcommittee on Higher Education and Workforce Development, Committee on Education and the Workforce, House of Representatives

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### DEPARTMENT OF EDUCATION

Preliminary Results Show Strong Leadership Needed to Address Serious Student Aid System Weaknesses

Statement of Marisol Cruz Cain, Director, Information Technology and Cybersecurity

## **GAO**Highlights

Highlights of GAO-24-107783, a testimony before the Subcommittee on Higher Education and Workforce Development, Committee on Education and the Workforce, House of Representatives

### Why GAO Did This Study

For decades, FAFSA forms were processed electronically by the legacy Central Processing System. In 2021 FSA initiated a system development effort and in December 2023 deployed a new system to process forms for the 2024-2025 school year. However, student aid applicants reported that the new system had availability issues, recurring errors, and long wait times.

This GAO testimony (1) describes the delays in delivering on FPS requirements; (2) describes the defects that were identified before and after FPS deployment; (3) assesses the extent to which disciplined systems acquisition practices were used to manage FPS requirements, conduct systems testing, and carry out independent acquisition reviews; and (4) assesses the extent to which Education and FSA IT leadership provided oversight of FPS development. This statement is a companion to GAO's related statement on the simplified FAFSA rollout (GAO-24-107407).

In addressing the first two objectives, GAO summarized the preliminary results of its continuing ongoing work describing delays and defects. For the latter two objectives on requirements, testing, and independent reviews, GAO completed its audit work and is making recommendations to address weaknesses.

### What GAO Recommends

GAO is making six recommendations to Education, including adhering to agency policy in managing requirements and testing, developing policy for independent acquisition reviews, and hiring a permanent departmental CIO. Education provided technical comments, which GAO incorporated as appropriate.

View GAO-24-107783. For more information, contact Marisol Cruz Cain at (202) 512-5017 or cruzcainm@gao.gov.

#### September 24, 2024

### **DEPARTMENT OF EDUCATION**

### Preliminary Results Show Strong Leadership Needed to Address Serious Student Aid System Weaknesses

### What GAO Found

Students and parents can apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA) form and submitting it to the Department of Education's Office of Federal Student Aid (FSA). In February 2021 FSA started an effort to replace the aging system that processes the forms.

The subsequent launch of the new system in December 2023 resulted in continuing delays and errors that had troubling impacts on students, parents, and schools, including their ability to plan for the upcoming school year. GAO's preliminary results show that, after awarding the contract for the new FAFSA Processing System (FPS), FSA encountered issues that led to several delays. Specifically, in early 2023, it moved the delivery of 25 key requirements to December 2023. FSA subsequently decided to not address 18 of the 25 key requirements in the launch of FPS. One of the requirements not included was the capability to determine final aid eligibility and distribute those results to schools.

GAO's preliminary results indicate that FSA identified and reportedly addressed significant defects prior to deploying FPS. However, the agency also identified numerous defects after deploying the system. Specifically, according to documentation compiled on March 6, 2024, the agency identified 55 defects—including seven that were unresolved and categorized as "critical." For example, one such critical defect resulted in FSA initially overestimating some students' aid eligibility by erroneously excluding their families' assets from the calculation.

The existence of unresolved defects after FPS deployment can be traced, in part, to FSA not ensuring disciplined systems acquisition practices were applied.

- Define and manage requirements and carry out testing activities. Although FSA established agency guidance to define and manage requirements and carry out testing activities, it did not always follow it. For example, although agency guidance states that a requirements oversight review is to be conducted before development begins, the agency did not conduct this review until more than a year after development had started. In addition, FSA authorized system acceptance testing to begin even though 26 of the 48 readiness indicators were not complete.
- Carry out independent acquisition reviews. One way to manage the risks
  in acquiring systems is through independent verification and validation. This
  is a process conducted by a party independent of the acquisition that
  provides an assessment of a project's processes, products, and risks
  throughout its life cycle. However, FSA did not establish or implement
  quidance to carry out independent verification and validation for FPS.

Education's lack of consistent leadership contributed to the difficulties encountered with the FPS acquisition. For example, although Education established processes that give its Chief Information Officer (CIO) a significant role in the governance and oversight processes for IT, it did not follow these processes for FPS. In addition, Education does not have a permanent CIO and has had six CIOs since the FPS project was initiated in February 2021. Until the department addresses these weaknesses, it will be hampered in its ability to make needed improvements to FPS. This could put the 2025-2026 FAFSA cycle at increased risk for experiencing further delays and technical errors.

Chairman Owens, Ranking Member Wilson, and Members of the Subcommittee:

Thank you for the opportunity to contribute to today's discussion on the Department of Education's modernization of its Free Application for Federal Student Aid (FAFSA). Within Education, the Office of Federal Student Aid (FSA) is the nation's largest source of student financial aid, with millions of students and their parents annually applying for post-secondary education aid using the FAFSA form.

Historically, most FAFSA forms submitted by applicants were processed electronically by FSA's Central Processing System (CPS). In 2019, we reported that CPS was among the 10 most critical federal systems in need of modernization.<sup>1</sup>

Recognizing the need for modernization, in February 2021 FSA initiated a project to develop the FAFSA Processing System (FPS) and replace CPS.<sup>2</sup> In June 2023, we reported that FSA planned to deploy the FPS system by December 2023.<sup>3</sup> However, we also found weaknesses in the project's schedule, and therefore concluded that the project was at risk of delays.

In late December 2023, FSA deployed FPS to process the 2024-2025 FAFSA forms. Subsequently, student aid applicants reported availability issues, submission errors, and significant load times,<sup>4</sup> among other things. Further, according to FSA, in late March and early April 2024 processing and data errors were identified that affected approximately 30 percent of FAFSA forms. Those issues left students and colleges without the information they needed to make important financial decisions about the upcoming school year. In addition to this statement, we are also

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<sup>&</sup>lt;sup>1</sup>GAO, Information Technology: Agencies Need to Develop Modernization Plans for Critical Legacy Systems, GAO-19-471 (Washington, D.C.: June 11, 2019).

<sup>&</sup>lt;sup>2</sup>In February 2021, FSA initiated a multi-project program called the Student Aid Borrower Eligibility Reform (SABER) initiative, which among other things, is intended to modernize the student financial aid process and CPS. Within SABER, the project for replacing CPS with FPS is referred to as the Award Eligibility Determination (AED) project. For purposes of this statement, we refer to AED as the FPS project or FPS.

<sup>&</sup>lt;sup>3</sup>GAO, Department of Education: Federal Student Aid System Modernization Project Should Better Estimate Cost and Schedule, GAO-23-106376 (Washington, D.C.: June 21, 2023).

<sup>&</sup>lt;sup>4</sup>In the context of a web-based application, such as FPS, load times refer to the amount of time a specific page took to load, including all images, text, and other technical elements.

issuing a companion statement today on our other work examining the simplified FAFSA rollout.<sup>5</sup>

This statement summarizes our work reviewing FPS's development and oversight.<sup>6</sup> Specifically, the statement (1) describes the delays in delivering FPS requirements; (2) describes the defects that were identified before and after FPS deployment; (3) assesses the extent to which FSA ensured the application of disciplined systems acquisition practices to manage FPS requirements, conduct systems testing, and carry out independent acquisition reviews; and (4) assesses the extent to which Education and FSA IT leadership provided oversight of FPS development.

In addressing the first two objectives, we summarized the preliminary results of our continuing ongoing work describing delays and defects. For the latter two objectives on requirements, testing, and independent reviews, we completed our audit work.

To address our first objective, we reviewed FSA project management documentation that identified and described delays in delivering FPS capabilities. For example, we reviewed weekly progress reports developed by the FPS contractor, risk management logs, FAFSA-related announcements made available on FSA's website, and the primary system development contract. In addition, we reviewed FSA documentation describing which contractual requirements were addressed in the first two FPS releases. Further, we interviewed responsible Education and FSA officials to determine the factors that led to the delays.

To address our second objective, we reviewed and analyzed documentation prepared by FSA and the FPS contractor describing defects before and after initial system deployment. In particular, to identify any known defects prior to deployment, we reviewed system readiness results prepared for FSA senior management on December 23, 2023. In addition, we reviewed FPS defect data as of March 6, 2024, that summarized defects identified between January and early March 2024.

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<sup>&</sup>lt;sup>5</sup>GAO, FAFSA: Education Needs to Improve Communications and Support Around the Free Application for Student Aid, GAO-24-107407 (Washington, D.C.: Sept. 24, 2024).

<sup>&</sup>lt;sup>6</sup>We are performing this ongoing work at the request of the Ranking Member of the Senate Committee on Health, Education, Labor, and Pensions and the Chairwoman of the House Committee on Education and the Workforce.

Further, we analyzed the FSA's approach to managing these defects, including how they were prioritized for resolution. We also interviewed FSA officials to better understand the scope and nature of the defects and their impacts on system performance.

To assess the reliability of the FPS defect data, we reviewed the documentation for obvious errors in accuracy and completeness. We also interviewed FSA officials to confirm the scope of the defects that were included in the documentation we reviewed. We determined that the defect data are reliable for purposes of this statement, which is to (1) describe the number of defects that were known to FSA before and after FPS was deployed and (2) identify certain defects that were resolved, as of early September 2024. However, as discussed in more detail later in this statement, the defects described in the documentation did not reflect all defects that existed in the system at those times.

To address the third objective, we compared FSA's systems development guidance<sup>7</sup> to leading industry acquisition practices for defining and managing requirements and carrying out testing activities.<sup>8</sup> In doing so, to date we have focused on five selected practices.<sup>9</sup> Two of the practices relate to defining and managing requirements and the remaining three are associated with carrying out testing activities:

### Define and manage requirements.

- Ensure bidirectional traceability between high-level and lower-level detailed requirements.
- Conduct a requirements oversight milestone review.

### Carry out testing activities.

- Develop well-defined test plans for each test event.
- Conduct a series of test events.
- Conduct system testing oversight milestone reviews.

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<sup>&</sup>lt;sup>7</sup>FSA, *Lifecycle Management Methodology*, Version 2.3 (Sept. 27, 2022).

<sup>&</sup>lt;sup>8</sup>ISACA, CMMI Model V3.0 (Pittsburgh, PA: Apr. 6, 2023). CMMI Model and ISACA© [2021] All rights reserved. Used with permission; Institute of Electrical and Electronics Engineers, Inc., Software and systems engineering—Software testing—Part 3: Test documentation, IEEE/ISO/IEC std. 29119-3:2021 (New York, N.Y., 2021).

<sup>&</sup>lt;sup>9</sup>We will continue to review FSA's efforts to ensure the application of additional disciplined systems acquisition practices to define and manage FPS requirements and conduct systems testing.

In addition, we compared FSA's efforts to ensure the application of the selected practices with its guidance on those topics. <sup>10</sup> To do so, we reviewed requirements management plans, requirements oversight milestone artifacts, test plans, test cases, and testing oversight milestone artifacts. In addition, we conducted interviews with relevant FSA officials to obtain an understanding of the processes in place to manage requirements and system testing.

We also compared Education and FSA's IT acquisition policies and guidance with our prior work on two elements of effective independent acquisition reviews that are relevant to FSA.<sup>11</sup> Those elements are: (1) standards for independence<sup>12</sup> and (2) defined scope of the effort.<sup>13</sup> In addition, we reviewed the scope of the independent reviews for FPS and the results of independent testing on that system.

To address the fourth objective, we reviewed Education's and FSA's IT acquisition policy and guidance <sup>14</sup> and analyzed the extent to which they defined the role of the departmental and FSA CIOs in governance and oversight processes for IT. We then compared the departmental and FSA CIOs' governance and oversight for FPS with the processes defined in the department's and agency's policy and guidance. In doing so, we reviewed and analyzed artifacts documenting Education's IT governance reviews on the FSA IT budget and FPS oversight milestone review, as well as CIO risk ratings for the FPS project. Further, we compared the tenure of the Education's recent CIOs to results from our research which found that CIOs and former agency IT executives believed it was necessary for a CIO to stay in office for 3 to 5 years to be effective and 5

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<sup>&</sup>lt;sup>10</sup>FSA, Lifecycle Management Methodology, Version 2.3 (Sept. 27, 2022).

<sup>&</sup>lt;sup>11</sup>GAO, *Information Technology: DHS Needs to Improve Its Independent Acquisition Reviews*, GAO-11-581 (Washington, D.C.: July 28, 2011).

<sup>&</sup>lt;sup>12</sup>Thes standards are to describe the degree of technical, managerial, and financial independence required of the personnel or agents performing independent acquisition reviews.

<sup>&</sup>lt;sup>13</sup>The effort should document which program development or acquisition activities will be subject to independent acquisition reviews. Examples of such activities include requirements evaluation, design evaluation, risk evaluation, test evaluation, and system deployment readiness evaluation.

<sup>&</sup>lt;sup>14</sup>Education, *Information Technology Investment Management Directive*; *Information Technology Governance and Investment Management Guidance.* 

to 7 years to fully implement major change initiatives in large public-sector organizations.<sup>15</sup>

We provided a 19-page statement of facts to Education for review on August 26, 2024. Education provided technical comments, which we addressed as appropriate. We also provided a follow-up five-page statement of facts to Education for review on September 10, 2024. Education did not provide comments on this document. Further, we provided a draft of this statement to Education for comment on September 16, 2024. Education provided technical comments, which we incorporated as appropriate.

The work we performed for this testimony was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

### Background

To address the need to modernize CPS, FSA announced the Next Gen program in December 2017. The goal of this program was to develop and implement modernized technology, processes, and operations to improve student, parent, borrower, and school partner experiences throughout the student aid life cycle. FSA intended to modernize CPS through one of Next Gen's projects. The program estimated that the new CPS replacement system would be implemented by October 2022.

However, in April 2020 FSA canceled the contract solicitation for the CPS modernization project. FSA canceled the solicitation in response to the enactment of the Fostering Undergraduate Talent by Unlocking Resources for Education Act (FUTURE Act). 16 According to FSA officials, the act significantly changed how the office determines eligibility and the processes used to calculate student aid. The officials explained that additional requirements imposed by the act and the subsequent FAFSA

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<sup>&</sup>lt;sup>15</sup>GAO, Federal Chief Information Officers: Responsibilities, Reporting Relationships, Tenure, and Challenges, GAO-04-823 (Washington, D.C.: Jul. 21, 2004).

<sup>&</sup>lt;sup>16</sup>See FUTURE Act, Pub. L. No. 116-91, 133 Stat. 1189 (Dec. 19, 2019).

Simplification Act led FSA to abandon its initial approach and reassess its plans for developing the CPS replacement system.<sup>17</sup>

As such, in February 2021 FSA developed a new solicitation that was intended to replace and modernize CPS.<sup>18</sup> In March 2022, FSA awarded the system development contract for FPS. Of note:

- The contract was for an initial base period from March 2022 through September 2023 which included designing, developing, testing, and deploying FPS. Nine additional 1-year options for operating and maintaining FPS were also included in the contract.
- The contract type for most contract line items—including those
  pertaining to system design, development, testing, and deployment—
  is firm fixed price.<sup>19</sup> Such a structure provides for a price that is not
  subject to any adjustment based on the contractor's actual costs
  incurred in performing the contract.
- The contract does not include an incentive structure for any contract line items. Such structures are intended to further motivate the contractor in appropriate circumstances.
- As of March 2024, FSA had obligated approximately \$31.3 million for the contract and the total contract value (if all options are exercised) was \$141.7 million.

According to the contract, the following three capabilities for FPS were to be fully developed, tested, and deployed by October 1, 2023:

• **Input and development** were to enable (1) students and parents to complete the FAFSA application and submit corrections and updated information and (2) FSA to receive the application and correction data.

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<sup>&</sup>lt;sup>17</sup>FAFSA Simplification Act, Pub. L. No. 116-260, Div. FF, Title VII, 134 Stat. 3137 (Dec. 27, 2020). The FAFSA Simplification Act Technical Corrections Act amended the FAFSA Simplification Act to require FSA to implement these changes by July 1, 2024. See FAFSA Simplification Act Technical Corrections Act, Pub. L. No. 117-103, Div. R, Section 102(a)(1), 136 Stat. 819 (March 15, 2022).

<sup>&</sup>lt;sup>18</sup>FSA initiated the SABER program to address the requirements of the FUTURE Act and the FAFSA Simplification Act and enable critical changes to the student aid and borrower eligibility determination processes.

<sup>&</sup>lt;sup>19</sup>The contract type for the contract line item pertaining to printing and mailing is fixed unit price. In addition, the contract type for the contract line item for conference support is time and materials.

- Eligibility determination was to use various data point inputs (both from within the Education's databases and external federal databases) to determine a student's initial and ongoing qualification for federal aid.<sup>20</sup>
- Results distribution and availability were to generate and distribute eligibility determination results for applications, school partners, and other authorized recipients.

According to FSA, these three capabilities are comprised of 25 contractual requirements. Eight of those requirements are associated with the input and development capability, another 10 in eligibility determination, and the remaining seven in results distribution and availability.

GAO and Education's Inspector General Have Previously Reported on Challenges in FSA's Management of FPS and Other IT Systems

We and Education's Inspector General have issued reports highlighting various challenges in the department's management of FPS and other IT modernization efforts. For example:

• In June 2023, we reported that FPS had critical gaps in its process to manage the project's cost and schedule.<sup>21</sup> Specifically, contrary to best practices, the department had not developed a life cycle cost estimate to inform the budget for the project. In addition, Education officials did not document the assumptions, such as resource availability, that informed the schedule for the project. The schedule also lacked rationales for why 43 activities could not start any earlier than a specific date. These gaps limited the reliability of the schedule.

We recommended that Education ensure that a life cycle cost estimate is developed for the project and that the budget is updated based on this estimate. We also recommended that the department ensures that the project's schedule includes assumptions and constraints. The department agreed with our recommendations but, as of August 2024, they had not been implemented.

 In June 2024, Education's Inspector General reported on weaknesses in the way FSA adhered to its Lifecycle Management Methodology, its

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<sup>&</sup>lt;sup>20</sup>FPS used various data point inputs from external federal databases managed by the (1) Department of Homeland Security, (2) Department of Justice, (3) Department of the Treasury Internal Revenue Service, (4) Department of Veterans Affairs, and (5) the Social Security Administration.

<sup>&</sup>lt;sup>21</sup>GAO, Department of Education: Federal Student Aid System Modernization Project Should Better estimate Cost and Schedule, GAO-23-106376 (Washington, D.C.: June 21, 2023).

IT project delivery, and governance methodology for its Business Process Operations project. <sup>22</sup> For example, the Inspector General found that FSA could not provide a requirements traceability matrix that traces high level business requirements to detailed system requirements to help ensure that the system meets all requirements. In addition, the Inspector General attempted to review test summary reports to confirm that the project's various had been successfully tested and what defects, if any, had been identified. However, FSA was unable to provide 22 of the 32 required reports (69 percent). The Inspector General made several recommendations to FSA to improve requirements management and testing practices.

## Preliminary Results Show That FSA Delayed Delivery of Key FPS Requirements

The preliminary results of our ongoing work demonstrate that after awarding the contract for FPS development in March 2022, FSA encountered development issues (e.g., complex scope and lack of expertise). This led to two separate decisions to delay when FPS would deliver key requirements:

• In August 2022, FSA began the process of re-baselining the FPS schedule to move the delivery of all three FPS capabilities and the associated 25 contractual requirements from October 2023 to December 2023.<sup>23</sup> FSA officials added that the final decision for this schedule change was made in early 2023 after briefing leadership from the department and the Executive Office of the President. On March 21, 2023, FSA posted an announcement to its website notifying the public about this decision.<sup>24</sup>

FSA officials explained that several factors contributed to this decision, including the complexity of scope to implement both the FUTURE Act and FAFSA Simplification Act while modernizing a process that the agency had not been significantly altered in 40

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<sup>&</sup>lt;sup>22</sup>U.S. Department of Education Office of Inspector General, *FSA Transition Plans for Business Process Operations Vendors*, ED-OIG/A22DC0105 (Washington, D.C.: June 18, 2024). The Business Operations Project is part of a component of FSA's work to overhaul federal student loan processing. As part of this project, FSA planned to transition assigned activities to vendors in three phases: (1) non-servicing functional areas, such as Borrower Defense cases; (2) servicing specialty programs, such as Public Service Loan Forgiveness; and (3) recovery relating to certain collection and default activities (e.g., wage garnishment).

<sup>&</sup>lt;sup>23</sup>According to FSA officials, in June 2022 the FPS project team began working with FSA leadership and the system development contractor to address concerns regarding the delivery of the FAFSA application for the 2024–2025 award cycle.

<sup>&</sup>lt;sup>24</sup>In April 2023, FSA modified the FPS development contract to extend the base period's end date from September 2023 to December 2023.

years.<sup>25</sup> These officials also noted that system development delays had cascading effects on other schedule dependencies and there was a lack of available experts to focus on the implementation.<sup>26</sup>

- In November 2023, FSA decided that it would only deploy seven of the 25 contractual requirements in December 2023. Specifically, FSA decided to address
  - four of the eight requirements for the input and development capability,
  - two of the ten requirements in eligibility determination, and
  - one of the seven requirements in results distribution and availability capability.

Further, FSA decided to delay the deployment of the remaining 18 contractual requirements until a later date. This delay occurred because, according to FSA officials, development of the remaining requirements was behind schedule and the contractor needed additional time to finish development and testing of the requirements.<sup>27</sup>

On November 15, 2023, FSA posted an announcement to its website notifying the public that the FAFSA form would be available for parents and students by December 31, 2023. In this announcement, FSA stated that colleges would begin receiving aid eligibility information by the end of January 2024.<sup>28</sup> However, as discussed in more detail in our report on the

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<sup>&</sup>lt;sup>25</sup>FAFSA Simplification Act, Pub. L. No. 116-260, Div. FF, Title VII, 134 Stat. 3137 (Dec. 27, 2020). The FAFSA Simplification Act makes significant changes to the underlying processes and methodologies for determining federal student aid eligibility. The FAFSA Simplification Act Technical Corrections Act amended the FAFSA Simplification Act to require FSA to implement these changes by July 1, 2024. See FAFSA Simplification Act Technical Corrections Act, Pub. L. No. 117-103, Div. R, Section 102(a)(1), 136 Stat. 819 (March 15, 2022).

<sup>&</sup>lt;sup>26</sup>FSA officials explained that the lack of available experts stemmed from the agency's reliance on experts that were simultaneously staffed to other modernization and high priority projects.

<sup>&</sup>lt;sup>27</sup>In August 2024, we requested that Education schedule a meeting for us to interview the contractor regarding this delay, among other things. On September 10, 2024, Education scheduled the meeting for September 19, 2024.

<sup>&</sup>lt;sup>28</sup>https://fsapartners.ed.gov/knowledge-center/library/electronic-announcements/2023-11-15/update-simplified-streamlined-redesigned-2024-25-fafsa-updated-jan-30-2024.

FAFSA simplification rollout,<sup>29</sup> the agency did not start sending aid eligibility information to schools until March 2024.<sup>30</sup>

According to FSA, it deployed the seven contractual requirements described above on December 30, 2023. FSA officials stated that the agency deployed an additional nine of the remaining 18 contractual requirements on March 8, 2024. Specifically, FSA addressed

- one of the remaining four requirements for the input and development capability,
- six of the remaining eight requirements associated for the eligibility determination capability, and
- two of the remaining six requirements associated for the results distribution and availability capability.

FSA officials explained that additional functionality was deployed in separate releases between March and August 2024. In addition, FSA officials explained that several contractual requirements have not yet been addressed. Those officials added that the remaining requirements will be deployed across several releases starting in fall 2024 (2025-2026 FAFSA cycle). FSA expects for additional releases to occur in calendar year 2025 (2026-2027 FAFSA cycle), and that the final requirements will be released in calendar year 2026 (2027-2028 FAFSA cycle).

However, FSA has not yet provided documentation describing which contractual requirements were addressed in releases that deployed after March 8, 2024, and what is planned as part of each future release. We will continue to examine which contractual requirements were addressed and what is planned for future releases.

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<sup>&</sup>lt;sup>29</sup>GAO, FAFSA: Education Needs to Improve Communications and Support Around the Free Application for Federal Student Aid, GAO-24-107407 (Washington, D.C.: Sept. 24, 2024).

<sup>&</sup>lt;sup>30</sup>https://fsapartners.ed.gov/knowledge-center/library/electronic-announcements/2024-03-12/additional-details-2024-25-isir-delivery-updates-non-ssn-contributors-and-launch-fafsapartner-portal-updated-march-13-2024.

# Preliminary Results Demonstrate FSA Did Not Identify Numerous FPS Defects until after System Deployment

FPS functionality and performance testing for the initial December release were completed on December 23, 2023; according to FSA officials, all significant defects were resolved prior to deployment.<sup>31</sup> Specifically:

- Defects related to functionality. FPS testing of the initial system as a whole (i.e., that addressed seven of the 25 contractual requirements) identified 26 functionality-related defects—16 of which were unresolved as of around December 23, 2023. Of those 16 unresolved defects, six were identified as "urgent" (i.e., prevents the accomplishment of a mission-essential capability) and three were identified as "high" (i.e., adversely affects the accomplishment of a mission essential capability and no work around solution is known). FSA officials told us that they addressed the six urgent and three high defects before system launch on December 30, 2023.<sup>32</sup>
- Defects related to performance. FPS testing of the initial system as a whole identified three performance-related defects—one of which was unresolved as of around December 23, 2023. The unresolved defect was categorized as "low"—meaning that it results in user inconvenience or annoyance but does not affect a mission-essential capability.<sup>33</sup>

After reviewing the results of FPS testing and reported resolution of all significant defects,<sup>34</sup> FPS senior management approved the system for deployment.

### FSA Identified Numerous Significant Defects after FPS Deployment

After the initial deployment of FPS, FSA identified numerous defects. Specifically, according to FSA documentation that was compiled on March 6, 2024, FSA identified 55 defects after the initial deployment of FPS—about twice as many defects as identified from testing the system as a whole prior to deployment. Specifically:

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<sup>&</sup>lt;sup>31</sup>According to FSA guidance, the agency generally does not deploy functionality that has defects categorized as "urgent" (i.e., prevents the accomplishment of a mission-essential capability) or "high" (i.e., adversely affects the accomplishment of a mission essential capability and no work around solution is known).

<sup>&</sup>lt;sup>32</sup>We have not yet verified that these defects were resolved before launch.

<sup>&</sup>lt;sup>33</sup>Of note, one of the final performance tests prior to launch identified several system performance issues, such as numerous errors involving communication issues between the user's web browser and relevant FPS server. FSA and the FPS development contractor did not classify these issues as defects.

<sup>&</sup>lt;sup>34</sup>According to documentation summarizing testing results for FSA management, FSA does not typically deploy software that has defects categorized as "urgent" or "high."

- 35 of the 55 defects were resolved as of March 6, 2024. For example, one of the resolved defects related to submissions being blocked when parent application contributors did not manually enter tax information and did not provide an updated family size.
- 20 of the 55 defects were unresolved, as of March 6, 2024. Of those open defects,
  - seven were identified as "critical" severity (i.e., prevents the accomplishment of a mission essential capability), 35
  - six were identified as "high" (i.e., adversely affects the accomplishment of a mission essential capability and no work around solution is known),<sup>36</sup> and
  - seven were identified as "medium" (i.e., adversely affects the accomplishment of a mission essential capability but a work around solution is known).<sup>37</sup>

For example, one critical issue that was unresolved resulted in FSA initially overestimating some students' aid eligibility by erroneously excluding their families' assets from the calculation. According to FSA officials, this issue resulted in erroneously calculated aid eligibility for a small number of applicants. Those officials added that the agency addressed the errors when the forms were processed.

FSA officials explained that the project team and the officials responsible for its development did not identify these defects prior to deployment because they reduced planned testing activities to focus on deploying input and development and preliminary eligibility determination functionality. FSA officials added that they decided to focus on deploying this functionality to allow students and families to begin submitting financial aid applications. FSA officials also told us they accepted the risk of reducing testing activities because the application cycle was already late and the Department was required to launch by the statutory deadline

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 $<sup>^{35}</sup>$ According to Education officials, the seven critical defects were resolved by March 11, 2024

<sup>&</sup>lt;sup>36</sup>According to Education officials, five of the six high defects were resolved by March 22, 2024, and the remaining defect was resolved on June 6, 2024.

<sup>&</sup>lt;sup>37</sup>According to Education officials, one of the seven medium defects was resolved on March 25, 2024. In addition, Education officials stated that two of the defects were "cancelled," as of May 7, 2024; those officials explained that one defect could not be replicated and the other represented expected system behavior. Further, Education officials noted that the other four medium defects have not been resolved, as of September 19, 2024.

of January 1, 2024. We will continue to examine the status of the FPS defects and the steps taken to resolve them.

### FSA Did Not Always Ensure Application of Disciplined Systems Acquisition Practices

Well-defined and managed requirements are essential to successfully acquiring large-scale systems, like FPS. As such, it is important that requirements for FPS be defined and managed with the rigor and discipline embodied in relevant guidance. To do less unnecessarily increases the risk of delivering a system solution that does not fully meet user needs or perform as intended, and thus requires additional time and resources to deliver.

Leading industry acquisition practices call for organizations to establish and implement policies and guidance that incorporate the following selected practices:<sup>38</sup>

- Ensure bidirectional traceability between high-level and lower-level detailed requirements to enable, among other things, projects to confirm that higher-level requirements have been met by testing that lower-level system requirements have been satisfied.
- Conduct a requirements oversight milestone review to, among other things, gain confidence that the requirements deliverables provide the capabilities needed.

FSA has established guidance for identifying and managing IT requirements consistent with these selected practices and required that the FPS development contractor adhere to the guidance.<sup>39</sup> For example, FSA's guidance calls for the agency to conduct a requirements oversight milestone review prior to the start of development.

However, FSA did not always ensure that this guidance was followed for FPS. In particular:

Ensure bidirectional traceability between high-level and lower-level detailed requirements. An FSA official told us that the contractor did not document bidirectional traceability between high-level and lower-level detailed requirements until after FPS initial

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<sup>&</sup>lt;sup>38</sup>ISACA, *CMMI Model V3.0* (Pittsburgh, PA: Apr. 6, 2023). CMMI Model and ISACA© [2021] All rights reserved. Used with permission.

<sup>&</sup>lt;sup>39</sup>FSA, *Lifecycle Management Methodology*, Version 2.3, (Sept. 27, 2022).

deployment in December 2023.<sup>40</sup> Consequently, FSA did not have confidence that higher-level requirements were met by testing lower-level system requirements.

• Conduct a requirements oversight milestone review. FSA conducted a requirements oversight review milestone that made several recommendations for improving FPS requirements. For example, the reviewers recommended that the term "efficient" be defined for one requirement and that other requirements documents be updated to fill in sections labeled "TBD."

However, the review was completed on December 6, 2023—more than a year after development had begun.<sup>41</sup> Consequently, FSA completed most development work without assurance that FPS requirements would fully meet user needs.

According to the FSA Assistant Deputy Chief Operating Officer, the agency's guidance for managing projects was designed for projects that release all functionality at one time—not across several releases, like FPS.<sup>42</sup> That official added that FSA made every effort to follow its guidance, but that the guidance did not always fit the agency's approach for implementing FPS across several releases.

However, FSA has not developed a plan that tailors the agency's guidance on developing and managing requirements to fit its current incremental deployment approach. Such a plan would better position the agency to follow leading requirements identification and management practices while continuing to deliver FPS functionality across future releases.

After we shared our preliminary results with Education, the FSA Assistant Deputy Chief Operating Officer stated that FSA has begun to draft a plan that tailors the agency's approach for following its guidance on, among other things, defining and managing requirements for future FPS releases. FSA expects to finalize that plan in early fall 2024. Although this plan could help address FSA's lack of rigor in defining and managing

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<sup>&</sup>lt;sup>40</sup>FSA officials explained that the FPS development contractor experienced technical challenges with its tool used to develop this documentation.

 $<sup>^{41}</sup>$ As previously mentioned, FSA guidance calls for requirements reviews to be completed before development begins.

 $<sup>^{42}</sup>$ As previously mentioned, FSA originally planned to deploy all FPS functionality at one time, but development issues and related schedule delays caused FSA to change those plans.

requirements for FPS, the details of this plan have yet to be fully defined. Until FSA develops and implements a plan for tailoring its approach for defining and managing FPS requirements, it will continue to be at increased risk of delivering FPS functionality that does not fully meet user needs.

### FSA Established Guidance to Carry Out FPS Testing Activities, but Did Not Always Follow It

Effective testing is integral to successfully acquiring and deploying a large-scale, complex system that needs to integrate with others, like FPS. As such, it is important that testing of FPS and its integration with other systems be managed with the rigor and discipline embodied in relevant guidance. To do less unnecessarily increases the risk of problems going undetected until late in the system's life cycle, such as when it is being accepted for use, or worse, after it becomes operational.

Leading industry acquisition practices call for organizations to establish and implement policies and guidance for testing IT systems that incorporate the following selected practices:<sup>43</sup>

- **Develop well-defined test plans** for each test event (e.g., plans that identify key details for each of the test events, such as roles and responsibilities, entry and exit criteria, and deliverables).
- **Conduct a series of test events** prior to deploying the system that build upon previous tests, including integration, and user testing.
- Conduct system testing oversight milestone reviews with stakeholders and leadership to confirm that testing is effectively managed.

FSA has established guidance for testing IT systems consistent with two selected practices: developing well-defined test plans and conducting system testing oversight milestone reviews. However, FSA did not ensure that the agency's guidance was followed for FPS for those two practices. Specifically:

Develop well-defined test plans. FSA did not ensure that its system
development contractor developed well-defined test plans. Although
the contractor developed a draft plan for testing major FPS releases,
the plan was not finalized before testing began. In addition, the plan
did not include key details for each of the test events, such as roles

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<sup>&</sup>lt;sup>43</sup>ISACA, CMMI Model V3.0 (Pittsburgh, PA: Apr. 6, 2023). CMMI Model and ISACA© [2021] All rights reserved. Used with permission. GAO; Institute of Electrical and Electronics Engineers, Inc., Software and systems engineering—Software testing—Part 3:Test documentation, IEEE/ISO/IEC std. 29119-3:2021 (New York, N.Y., 2021).

and responsibilities, entry and exit criteria, and deliverables.<sup>44</sup> As a result, FSA officials were not well-informed about the system tests the contractor planned to perform prior to system launch. Nevertheless, FSA gave approval for its contractor to perform various testing activities.

- Conduct system testing oversight milestone reviews. To its credit, FSA conducted two system testing oversight milestone reviews called for by FSA guidance—a review to determine readiness for user acceptance testing and a review to determine readiness to deploy the system. However, FSA senior management approved both milestone reviews even though significant work had not yet been completed. For example:
  - User acceptance testing readiness review. Of the 48 testing readiness indicators reviewed by FSA senior management, 26 were not complete at the time management approved the milestone. For instance, the review acknowledged that user acceptance test cases were not complete, testers had not been assigned, and the relevant tests had not been scheduled.<sup>45</sup> Nevertheless, FSA senior management approved the milestone—thus increasing the risk that testing would not identify all FPS problems prior to deployment.
  - System production readiness review. As discussed in more detail
    later in this statement, the information reviewed by FSA senior
    management did not discuss the results of testing performed by
    FSA's independent acquisition reviewers. This is particularly
    concerning because this independent review did not test all
    aspects of the input and development functional capability.

For the remaining practice—**conducting a series of test events**—FSA did not fully establish and implement guidance for consistent with leading industry guidance. Specifically, FSA conducted several test events for FPS prior to initial deployment in December 2023 consistent with the agency's guidance, including integration and performance testing.

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<sup>&</sup>lt;sup>44</sup>FSA officials noted that the agency prioritized supporting the contractor in completing their development efforts after gaining greater visibility into their development progress and how far behind they were in completion.

 $<sup>^{45}</sup>$ FSA officials noted that the agency (1) had a finite schedule before the statutory deadline of January 1, and (2) was limited by what the FPS contractor was delivering for testing. FSA officials added that both of these factors impacted FSA's ability to finalize testing activities.

However, FSA's guidance does not describe how the agency conducts testing with FAFSA's end users—the general public.

In the absence of this guidance, FSA did not test the initial system as a whole with actual end users (e.g., student and parent applicants, and colleges) prior to deploying the system to all users. FSA officials explained that they did not conduct such testing due to time constraints.<sup>46</sup> As a result, FSA officials did not have assurance that FPS would meet end user needs.

As previously mentioned, the FSA Assistant Deputy Chief Operating Officer told us that the agency's guidance for managing projects was designed for projects that deploy all functionality at one time—not across several releases, like FPS.<sup>47</sup> That official added that FSA made every effort to follow its guidance, but that the guidance did not always fit the agency's approach for implementing FPS.

However, FSA had not developed a plan that tailors the agency's guidance on system testing to fit its current incremental deployment approach. Such a plan would better position the agency to follow leading system testing practices while continuing to deliver FPS functionality across future releases.

After we shared our preliminary results with Education, FSA officials stated that they planned to conduct FPS beta testing (i.e., a final or near final round of testing prior to release) with members of the public for the

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<sup>&</sup>lt;sup>46</sup>FSA officials noted that they conducted 21 user experience research studies with over 230 participants—selected from a broad spectrum of individuals—to enhance the FAFSA experience. Those officials explained that these studies included usability testing where participants engaged with early designs before development, as well as usability testing once the form was live in late December 2023. FSA officials added that this approach enabled a detailed evaluation of various elements of the application system, including the overall user experience.

 $<sup>^{47}</sup>$ As previously mentioned, FSA originally planned to deploy all FPS functionality at one time, but development issues and related schedule delays caused FSA to change those plans.

2025-2026 FASFA cycle beginning in October 2024.<sup>48</sup> In addition, FSA's Assistant Deputy Chief Operating Officer stated that FSA has begun drafting a plan that tailors the agency's approach for following its guidance on, among other things, carrying out testing activities for future FPS releases. FSA expects to finalize that plan in early fall 2024.

Although this plan could help address FSA's lack of rigor in defining and managing requirements for FPS, the details of this plan have yet to be fully defined. Until FSA develops and implements a tailoring plan to guide FPS testing activities, it will be at increased risk of problems going undetected until future FPS functionality becomes operational.

FSA Did Not Establish and Implement Guidance to Carry Out Independent Acquisition Reviews for FPS

The use of an effective independent verification and validation (IV&V) process is key to reducing the risks inherent in complex system acquisition efforts such as FPS. IV&V involves having a knowledgeable party who is independent of the developer determine that the system or product meets the users' needs and fulfills its intended purpose. If carried out effectively, IV&V can enable projects to proactively determine likely project risks early in the system development lifecycle.

Our prior work identified two selected elements of effective IV&V that should be adopted in agency policies and guidance.<sup>49</sup> Those elements include:

 Standards for independence. Organizations should also include standards that describe the degree of technical, managerial, and financial independence required of the personnel or agents performing IV&V.<sup>50</sup>

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<sup>&</sup>lt;sup>48</sup>In August 2024, FSA announced that it will conduct a series of beta tests starting October 1, 2024, to uncover and fix issues with the FAFSA form before the form is made available to millions of students and their families on or before December 1, 2024. According to the announcement, during the beta tests, FSA will work with community-based organizations, high schools, institutions of higher education, states, and limited groups of students and contributors to fill out and submit the form. https://www.ed.gov/news/press-releases/us-department-education-releases-framework-2025%E2%80%9326-fafsa-testing-period-and-interest-form-first-beta-period.

<sup>&</sup>lt;sup>49</sup>GAO, *Information Technology: DHS Needs to Improve Its Independent Acquisition Reviews*, GAO-11-581 (Washington, D.C.: July 28, 2011).

<sup>&</sup>lt;sup>50</sup>Technical independence requires the effort to be performed by personnel who are not involved in the development of the system. Managerial independence requires that the agent be managed separately from the development and program management organizations. Financial independence requires that the funding for IV&V be controlled by an organization separate from the development organization.

Defined scope of the effort. The effort should document which
program development or acquisition activities will be subject to IV&V.
Examples of such activities include requirements evaluation, design
evaluation, risk evaluation, test evaluation, system deployment
readiness evaluation.

FSA has not developed policy or guidance that adopts these elements. This weakness is reflected in FSA's implementation of IV&V for FPS. In particular:

- Standards for independence. It appears that the agent was not independent. Specifically, the agent was also a subcontractor of the prime contractor for FPS development. This introduced the potential risk that the IV&V agent may not want to be overly critical in order to encourage the FPS prime contractor to continue to do business with it. According to Education officials, the relevant contracts included a clause addressing organizational conflicts of interest. In addition, FSA officials explained that the teams performing IV&V and FPS development work had established controls for not sharing information between teams. However, these controls did not fully address the potential risk that the IV&V agent may not want to be overly critical of FPS development work.
- Defined scope of the effort. FSA did not ensure that its IV&V agent fully tested FPS prior to initial deployment in December 2023. FSA officials explained that FPS development contractor delivered to the independent party the FPS code to be tested much later than planned, and therefore not all aspects of functionality were tested prior to launch. This included functionality related to, for example, the Federal Tax Information Module Interface.<sup>51</sup> As a result, FSA did not have assurance that FPS was free of significant defects prior to initial deployment in December 2023.

In addition, FSA did not use an IV&V agent for any activities prior to testing, such as activities related to planning, requirements analysis, design, and integration. Consequently, FSA was not optimally positioned to identify and reduce FPS risks early in development.

Until FSA develops policy and guidance that reflects the key elements of IV&V and implements that policy for FPS, the agency will not be well-positioned to identify and address cost, schedule, and performance risks.

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<sup>&</sup>lt;sup>51</sup>According to FSA, the Federal Tax Information Module interface interacts with the Department of the Treasury's Internal Revenue Service to access taxpayer information and calculates the Student Aid Index for FPS.

## Education Did Not Provide Effective Oversight of FPS

Effective leadership, such as that of a CIO, can drive change, provide oversight, and ensure accountability for results for complex systems, like FPS. Congress has also recognized the importance of having a strong agency CIO with responsibility and accountability for IT acquisitions. For example, in December 2014, Congress enacted federal IT acquisition reform legislation (commonly referred to as FITARA), which required covered agencies, including Education, to ensure that the CIO has a significant role in the governance and oversight processes for IT.<sup>52</sup> Doing so can position CIOs to ensure that disciplined practices for managing IT acquisitions are being applied consistent with agency guidance.

Education has established a policy and separate guidance that define the role of the departmental CIO in governance and oversight processes for IT. Specifically:

- Investment reviews. The department's Information Technology Investment Management Directive and Information Technology Governance and Investment Management Guidance provide that the CIO is to conduct annual program assessments, quarterly reviews, and monthly reviews for all major IT investments.<sup>53</sup> In addition, the directive calls for the department's investment review board, which includes the CIO as a member, is to monitor and evaluate ongoing system investments against their projected costs, schedule, and benefits, and taken action to continue, modify, or terminate them.
- CIO risk ratings. Education's Information Technology Governance and Investment Management Guidance calls for CIOs to assess and report risk of major IT investments using a risk rating. Specifically, Education's guidance includes risk ratings as part of the monthly investment review process to manage and control cost and schedule performance variances and project risks.
- System development lifecycle reviews. The department's
   Enterprise Program Management Review process describes the
   system development life cycle process that IT systems are to use and
   the role of the CIO. For example, the CIO is to review all projects'
   business needs at project inception and delegates authority to an

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<sup>&</sup>lt;sup>52</sup>Carl Levin and Howard P. 'Buck' McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. No. 113-291, division A, title VIII, subtitle D, 128 Stat. 3292, 3438 (Dec. 19, 2014).

<sup>&</sup>lt;sup>53</sup>For example, the monthly reviews are to focus on managing and controlling cost and schedule performance variances and project risks.

enterprise review board to review projects in the "sprint and staging" phase (i.e., system development).

However, Education did not follow this policy and guidance for FPS. Specifically:

- Investment reviews. The Education CIO did not conduct
  assessments or reviews for FPS as called for by the department's IT
  investment management directive. Although the CIO participated in
  high-level annual and quarterly reviews of FSA's overall IT portfolio
  and budget, the reviews did not discuss FPS.
- CIO risk ratings. Education's CIO did not follow the department's risk rating process and update the rating for FPS on a monthly basis. The former CIO reviewed the risk associated with FPS in September 2021 and assigned it a rating of "3" representing medium risk. However, the CIO did not review the risk investment again until June 2024—nearly 5 months after initial deployment of FPS.
  - In July 2024, an Office of the CIO official told us that they did not conduct risk rating reviews between September 2021 and June 2024 because they were revising the department's related process. When asked whether compensating review or controls are in place, an Office of the CIO official referenced the cost and schedule data provided by FSA but acknowledged that these data are inaccurate.<sup>54</sup>
- System development lifecycle reviews. Education did not require FPS to follow the department's Enterprise Program Management Review process. An official from the Office of Education's CIO responsible for IT governance told us that the department generally does not use these processes for FSA projects and that these projects instead follow a separate system development lifecycle process for FSA projects—FSA's Lifecyle Management Methodology. However, as discussed in more detail later in the next section of this document, FSA's processes do not define a significant role for the FSA CIO.

Compounding these weaknesses, Education has lacked consistent leadership in its CIO position. We have previously noted that one element that influences the likely success of an agency CIO is the length of time the individual in the position has to implement change. For example, in our prior work on agency CIOs, we reported that CIOs and former agency

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<sup>&</sup>lt;sup>54</sup>Specifically, FSA's cost and schedule data reported to OMB for the AED investment indicate the project was completed in September 2023 and experienced 0% cost and schedule variance.

IT executives believed it was necessary for a CIO to stay in office for 3 to 5 years to be effective and 5 to 7 years to fully implement major change initiatives in large public sector organizations.<sup>55</sup>

However, since February 2021 when the FPS project was initiated, Education has had six CIOs. Specifically, Education had

- a permanent CIO from May 2016 to August 2022,
- an acting CIO from August 2022 to December 2022,
- a permanent CIO from December 2022 to March 2024,
- an acting CIO from March 2024 to April 2024, and
- a second acting CIO from April to July 2024
- a third acting CIO from July 2024 to present.

According to an Office of the CIO official, the department generally deferred to FSA to oversee FSA IT investments. However, Education has not fully documented this deference or delegation. Although the Education CIO has delegated responsibilities for reviewing cost estimates and acquisition plans for FSA projects to the FSA CIO, the department has not documented the delegation of other responsibilities—particularly those related to monitoring ongoing investments.

FSA Did Not Fully Define the Role of Its CIO in Agency-level IT Governance and Oversight Processes

FSA has established procedures and guidance that define the role of its agency's CIO in some of the agency's governance and oversight processes. For example:

- Investment review. FSA's procedures for its IT investment reviews
  call for the agency's investment review board, which includes the FSA
  CIO, to review projects when determining whether to provide them
  with funding.
- System development lifecycle. FSA's guidance on its Lifecyle
   Management Methodology calls for the FSA CIO to sign-off on the
   decision to deploy a system to production.

However, FSA's procedures and guidance do not define the role of the FSA CIO in all governance and oversight processes. For example:

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<sup>&</sup>lt;sup>55</sup>GAO, Federal Chief Information Officers: Responsibilities, Reporting Relationships, Tenure, and Challenges, GAO-04-823 (Washington, D.C.: Jul. 21, 2004).

- Investment review. FSA's Standard Operating Procedures do not define the role of FSA's CIO in the stages that follow the initial funding decision—specifically the reviews performed at the project execution and closeout phases.
- System development lifecycle. FSA's guidance on its Lifecyle
  Management Methodology does not define the role of FSA's CIO (or
  the CIO's delegates) in the stages prior to the decision to deploy a
  system, such as requirements review and test readiness review.
  Consequently, the FPS project manager told us that the FSA CIO was
  not involved in decisions to not follow certain elements of FSA's
  Lifecycle Management Methodology related to FPS requirements
  definition and management, and testing.

In addition, FSA did not always follow its processes where the role of the FSA CIO was defined. Specifically, with respect to FSA's **investment review** process, FSA's investment review board did not review FPS. FSA officials told us that the agency's investment review board has not reviewed any projects since 2019—before the contract for FPS was awarded in March 2022.

In the absence of a fully defined role for the FSA CIO in agency procedures and guidance, FSA's CIO told us that they were significantly involved in the FPS acquisition through the following:

- FSA's CIO said that they met with members of the FSA Enterprise
  Technology Directorate and the FPS project team, among others,
  three to five times each week for the 2 years leading up to the initial
  deployment of FPS to oversee the project.
- FSA's CIO said that they followed a governance framework that was
  established specifically for the SABER program (which includes FPS
  and other related projects). The governance framework called for
  FSA's CIO to make decisions regarding actions and changes that
  impact FSA's credibility (e.g., implementation timeline) or regarding
  clarity on FSA strategy and standards, impacts the department, or
  requires clarity on the department's strategic objectives.

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However, these activities did not provide the FSA CIO with oversight for the application of requirements, testing, and IV&V practices for FPS.<sup>56</sup>

After we shared our preliminary results with the department, Education's acting CIO explained that the department has plans to hire a permanent CIO by the end of September 2024. Although appointing a permanent CIO could potentially address Education's gap in IT leadership over FPS, the role of this official in the FPS acquisition have not been defined. If Education (1) hires a permanent CIO and (2) develops and implements a plan for providing the department CIO with a significant role in FPS while clarifying the role of the FSA CIO, it will be better positioned make needed improvements to the management of FPS.

### Conclusions

FSA has been working to modernize FAFSA forms processing since 2017. Similar to prior efforts, its most recent system development initiative has faced challenges since its 2021 start, including delaying delivery of capabilities and identifying significant defects after deployment.

The existence of unresolved defects after FPS deployment can be traced, in part, to FSA not always ensuring that disciplined systems acquisition practices were applied. While it had established policies to guide its requirements management and testing activities that were consistent with selected leading practices, it did not fully implement those policies. Further, FSA lacked a policy and sound implementation for IV&V reviews. Addressing these issues is essential for reducing and identifying risks, meeting user needs, and being positioned to identify and address cost, schedule, and performance issues.

Key to these shortcomings is Education's lack of consistent, effective leadership. The lack of CIO involvement in the governance of FPS led to diminished assurance that the project would implement disciplined acquisition practices. Such involvement is essential to successful IT modernizations.

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<sup>&</sup>lt;sup>56</sup>FSA's CIO told us that, although they may not have personally signed off on requirements, testing, and IV&V activities, the agency's technology team (led by the CIO) was directly involved at these activities at the direction of the CIO. However, FSA did not provide us with documentation demonstrating that the team's involvement in these activities.

### Recommendations for Executive Action

We are making six recommendations to Education:

The Secretary of Education should direct the Chief Operating Officer of FSA to (1) expeditiously develop a plan that tailors the agency's guidance on identifying and managing requirements to fit its current incremental deployment approach and (2) implement the plan thereafter. (Recommendation 1)

The Secretary of Education should direct the Chief Operating Officer of FSA to (1) expeditiously develop a plan that tailors the agency's guidance on system testing to fit its current incremental deployment approach and (2) implement the plan thereafter. (Recommendation 2)

The Secretary of Education should direct the Chief Operating Officer of FSA to expeditiously (1) develop an FSA policy on standards for IV&V independence and (2) ensure that FPS IV&V agents meet those standards. In developing the policy, FSA should define the degree of technical, managerial, and financial independence required of the personnel or agents performing IV&V. (Recommendation 3)

The Secretary of Education should direct the Chief Operating Officer of FSA to expeditiously (1) develop an FSA policy requiring that projects determine and document the appropriate scope of IV&V efforts and (2) ensure that the FPS project follows this policy. In developing the policy, FSA should require that projects consider IV&V activities across the acquisition lifecycle. (Recommendation 4)

The Secretary of Education should expeditiously appoint a permanent chief information officer. (Recommendation 5)

The Secretary of Education should expeditiously (1) assess the role of the department's and FSA's CIOs in the continuing development of FPS, and (2) based on that assessment, develop and implement a plan for providing the department's CIO with a significant role in the governance and oversight of FPS while clarifying the responsibilities between the departmental and agency CIO. (Recommendation 6)

### **Agency Comments**

We provided a draft of this statement to Education for review and comment. Education provided technical comments, which we incorporated into the statement as appropriate.

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Chairman Owens, Ranking Member Wilson, and Members of the Subcommittee, this completes our prepared statement. I would be pleased to respond to any questions that you may have.

### GAO Contact and Staff Acknowledgments

If you or your staff have any questions about this testimony, please contact Marisol Cruz Cain, Director of Information Technology and Cybersecurity at (202) 512-5017 or cruzcainm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. GAO staff who made key contributions to this testimony are Kaelin Kuhn, Nicole Jarvis (Assistant Directors), David Matcham (Analyst in Charge), Jillian Clouse, Rebecca Eyler, Ashley Mattson, Brandon Mitchell, and Walter Vance.

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Public Affairs	Sarah Kaczmarek, Managing Director, KaczmarekS@gao.gov, (202) 512-4800, U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548
Strategic Planning and External Liaison	Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548